

CLAIMS:

The invention claimed is:

1. A suspension system for an axle of a light duty trailer, said suspension system comprising:

two parallel angle iron frames, open to the top and inside and spaced apart wide enough to receive the box frame of said trailer and bolted to each side of said trailer box frame;

two control arm brackets suspended from the under side of said frames parallel to each other with control mounting notches facing rearward,;

two axle stop brackets suspended from the underside of said frames at a distance far enough behind said control arm brackets as to be directly over the proposed axle location, said axle stop brackets having two axle stops attached to their bottom surfaces;

two air spring mounting brackets suspended from the underside of said frames at a distance far enough behind said axle stop brackets as to allow standard air springs to clear the axle of said trailer;

two shock absorber brackets suspended from the under side of said frames at a distance far enough behind said air spring mounting brackets to allow shock absorbers to clear said air springs;

two control arms having front ends and rear ends with an axle alignment feature which can receive the axle centering dowel, with the front ends pivotally mounted in the said control arm brackets with polyurethane bushings and the rear ends pivotally mounted to the bottom ends of two shock absorbers which have the top ends pivotally mounted to said shock absorber brackets, allowing said control arms to be essentially parallel with the bottom of the trailer when at rest;

two air springs mounted between said air spring mounting brackets and the top surface of the top plate of said control arms at air spring mounting holes;

two sets of two u- bolts overarching said axle of trailer and connecting said axle to tops of control arms; and

two cross-braces connecting and stabilizing rail assemblies attaching at the tabs located on the leading inside top and bottom edges of said control arm brackets.

2. A suspension system as defined in claim 1 for a dual axle light duty trailer wherein a second set of brackets and control arms is suspended from the underside of said frames spaced behind the first set such that it centers its axle stops above the second axle.

3. A suspension system for an axle of a light duty trailer as defined in claim 1 wherein said two sets of two u- bolts are under arching said trailer axle and connecting said axle to bottoms of control arms.

4. A suspension system as defined in claim 2 wherein four sets of two u-bolts are under arching said trailer axles and connecting said axles to bottoms of said control arms.